

III. *Offis Bregmatis Giganteæ Magnitudinis Icon*; cum Problemate de Gigantis Statura determinanda secundum Regulas Artis Delin-eatoriæ: quæ ad Illustr. REGALIS SO-CIETATIS Præsidem D^m Hans Sloane, Bart. transmisit Jac. Theodor. Klein Reipubl. Gedan. a Secretis & Reg. Soc. Lond. Soc.

EX celebri museo, quod Amstelodami fuit, Wittseniano, os bregmatis giganteum *, cuius altitudo 9 poll. Angl. latitudo 7 (TAB. I.) una cum descriptione & adjuncta figura †, altitudinem capitum a mento ad verticem 20 poll. latitudinem ad tempora 12 poll. (TAB. II.) repræsentante, necnon aliud ejusmodi os, cuius altitudo 5 $\frac{6}{8}$ poll. Angl. latitudo 5 poll. sed sine figura & relatione ad caput anno 1728 naectus, facile invenire potui, assūmtis secundum regulas artis delineatoriæ octo capitum altitudinibus, statutam gigantis fuisse 13 ped. 4 poll. alterius vero offis bregmatis, quod insolitum quoque simulabat caput, justam rationem & quidem juxta regulas mathematicas scire cupidus, viro excellentissimo Henrico Kühn, J. U. D. & Athenæi *Dantiscani* mathef. P. P. meritissimo, sequens proposui Problema :

* Vid. Catal. Mus. Wittsen. p. 82.

† A pie defuncto Ruycklio comparatis;

Si



Si in duobus corporibus humanis diversæ staturæ
fuerit,

In Priore,

Ossis bregmatis altitudo 9 poll. Angli.
_____ latitudo 7.

Integri capitis altitudo 20.
_____ latitudo 12.

In Posteriore,

Ossis bregmatis altitudo $5\frac{6}{7}$ seu $\frac{46}{7}$ poll. Angl.
_____ latitudo 5.

Integri capitis altitudo ignota.
_____ latitudo ignota.

Determinare ignotum, & rationem staturæ prioris
ad posteriorem definire.

C U J U S T R I P L E X R E S O L U T I O , hæc:

Si corpora ista forent similia, res brevissime ex-
pediri posset, inferendo; ut in priore corpore, ossis
bregmatis altitudo ad integri capitis, vel etiam integri
corporis, (tanquam illius octuplam) altitudinem, ita
in posteriore corpore, ossis bregmatis altitudo vel
latitudo ad integri capitis, vel etiam integri corporis,
altitudinem quæsitam; quoniam vero 9 ad 7, & $\frac{46}{7}$ ad
5 sunt rationes dissimiles, corpora ista similia non
sunt. Quamobrem opus est, ut in calculo & altitu-
dinum & latitudinum ossium bregmatis ratio habeatur;
uti ex triplici methodo subiecta apparebit.

METHODUS PRIMA.

(Fiat α .) $9'' : 20'' = \frac{46''}{8} : \left\{ \begin{array}{l} \text{altitud. capitis quæsitam} \\ \frac{20 \cdot 46''}{9 \cdot 8} \end{array} \right.$

erit hujus octuplum $= \frac{8 \cdot 20 \cdot 46''}{9 \cdot 8} = \frac{20 \cdot 46''}{9} = \frac{920''}{9}$
 $= 102 \frac{2}{9} \left\{ \begin{array}{l} = 8 \text{ ped. } 6 \frac{2}{9} \text{ poll.} \\ = \text{staturæ corporis secundi.} \end{array} \right.$

(Fiat β .) $7'' : 20'' = 5'' : \left\{ \begin{array}{l} \text{altitud. capitis quæsitam;} \\ \frac{100''}{7} \end{array} \right.$

erit hujus octuplum $= \frac{800''}{7} = 114 \frac{2}{7} = 9 \text{ ped. } 6 \frac{2}{7} \text{ poll.}$
 $= \text{staturæ corporis secundi.}$

(Fiat γ .) Staturarum inventarum additio, & summæ bisectio, pro obtinendo medio arithmeticō, erit

$$\underline{\underline{8', 6'' \frac{2}{9} + 9', 6'' \frac{2}{7}}} = \frac{17', 12'' \frac{1}{2}}{2} \text{ quam prox.}$$

$= \frac{18' + \frac{1}{2}''}{2} \left\{ \begin{array}{l} = 9 \text{ ped. } \frac{1}{4} \text{ poll.} \\ = \text{structuræ corporis secundi proxime vera.} \end{array} \right.$

METHODUS SECUNDA.

(Fiat) $9'' + 7'' : \frac{46''}{8} + 5'' = 20''$: altitud. capitis
[posterioris.]

$$\text{h. e. } 16 : \frac{46 + 40}{8} = 20'' : \dots \dots \dots$$

$$\text{h.e. } 16 : \frac{86}{8} = 20'': \left\{ \begin{array}{l} \text{altitud. capitis posterioris} \\ \frac{20. 86''}{16. 8} = \frac{5. 86''}{4. 8} = \frac{430''}{32} = \frac{215''}{16} \end{array} \right.$$

$$\text{erit hujus octuplum} = \frac{8. 215''}{16} = \frac{215''}{2} = 107\frac{1}{2}$$

$$\left\{ \begin{array}{l} = 8 \text{ ped. } 11 \frac{1}{2} \text{ poll.} \\ = \text{staturæ corporis se-} \\ \text{cundi proxime veræ.} \end{array} \right.$$

Id quod cum priori calculo sic satis consentit, cum differentia $\frac{3}{4}$ pollicis non excedat.

METHODUS TERTIA.

Quoniam in diversorum corporum partibus cognominibus (e. g. in duobus ossibus bregmatis) superficies partium sunt inter se, ut quadrata altitudinum corporum integrorum; nec minus superficies istæ sint inter se, ut facta ex altitudinibus partium in latitudes: erunt etiam facta ex altitudinibus partium in suas latitudes inter se, ut quadrata altitudinum corporum integrorum. Quare, cum altitudo corporis prioris sit $20''$, adeoque ejus octuplum, seu altitudo in-

integri corporis prioris, sit $160''$, cuius quadratum est $25600''$; fiat

$$\begin{array}{l} \text{altitd. bregmat.} \\ \text{prioris.} \\ \text{in} \\ 9 \quad \bullet \quad 7 \end{array} : \begin{array}{l} \text{eius latitud.} \\ \text{altitud. bregm.} \\ \text{posterioris.} \\ \text{in} \\ 8 \quad \bullet \quad 5 \end{array} = \begin{array}{l} \text{eius latitud.} \\ \text{quadratum alti-} \\ \text{tudinis, prioris} \\ \text{corporis integri.} \\ \text{quadratum alti-} \\ \text{tudinis, post-} \\ \text{rioris corporis} \\ \text{integri.} \\ \dots \dots \end{array}$$

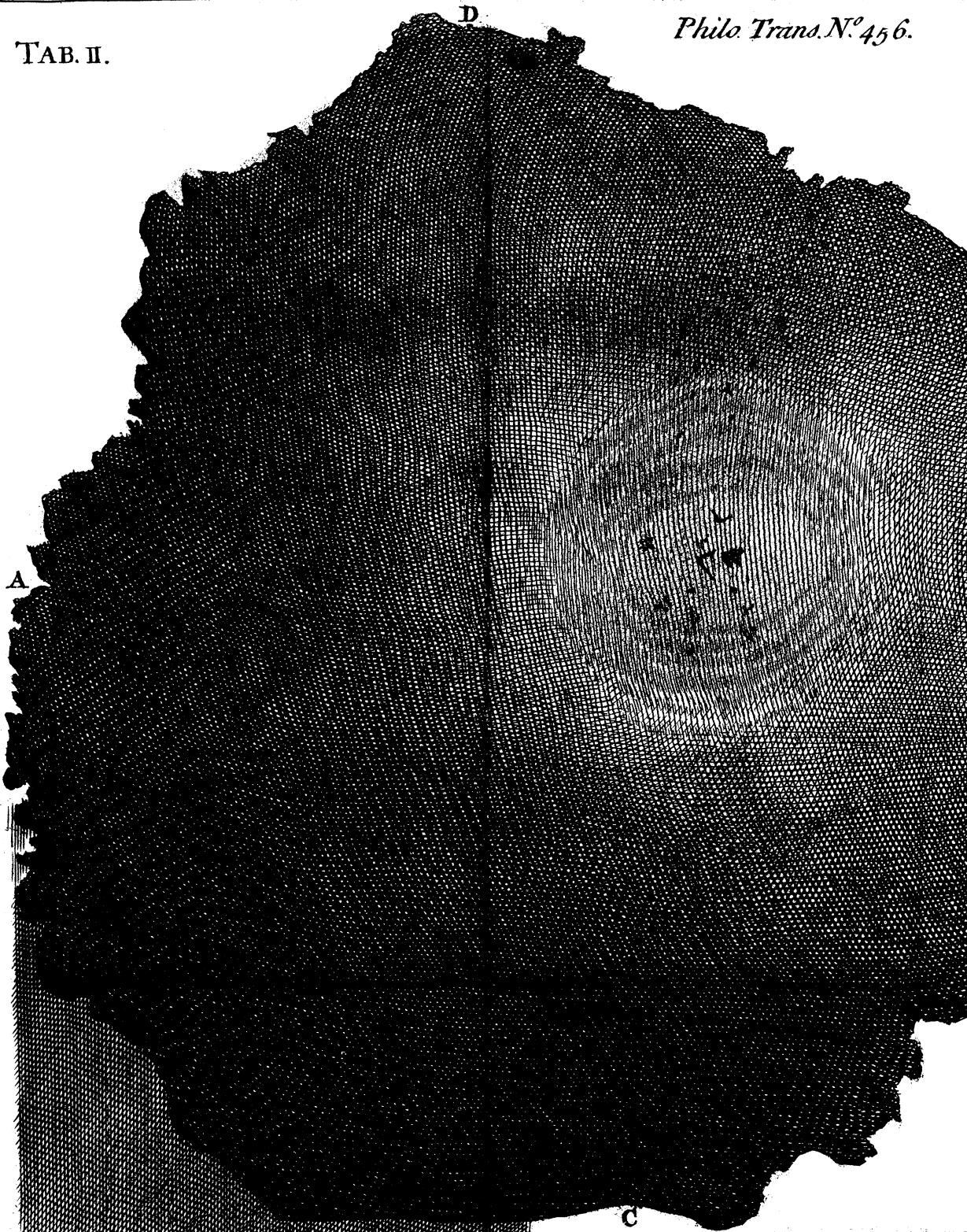
$$h. e. 63 : \frac{230}{8} = 25600'' : \frac{230 \cdot 25600''}{63 \cdot 8} = \frac{230 \cdot 3200''}{63}$$

$$\text{Cum itaque sit } \frac{230 \cdot 3200''}{63} = \frac{736000''}{63} = 11682 \frac{1}{63}''$$

quam proxime, = quadrato staturæ corporis secundi;
erit (radice quadrata ex 11682 extracta) ipsa corporis secundi statura quam proxime vera $= 108 = 9$ ped. o
poll. Angl. Quæ ipsa statura, cum sit inter supra inventas media, pro accuratissima est habenda.

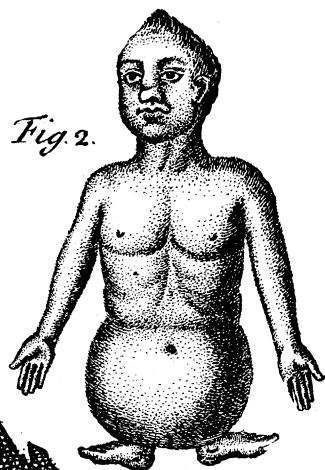
Denique, cum octo capitis altitudines pro statura corporis humani integri satis recte assumere soleamus, & capitis gigantei prioris altitudo sit 20 poll. Angl. erit statura gigantis prioris $= 8 \cdot 20'' = 160'' = 13$ ped. 4 poll. Angl. Consequenter statura gigantis prioris est ad staturam posterioris, ut 13 pedes, 4 pollices ad 9 pedes in mensura Anglicana, seu ut $160''$ ad $180''$ seu ut 40 ad 27 .

TAB. II.



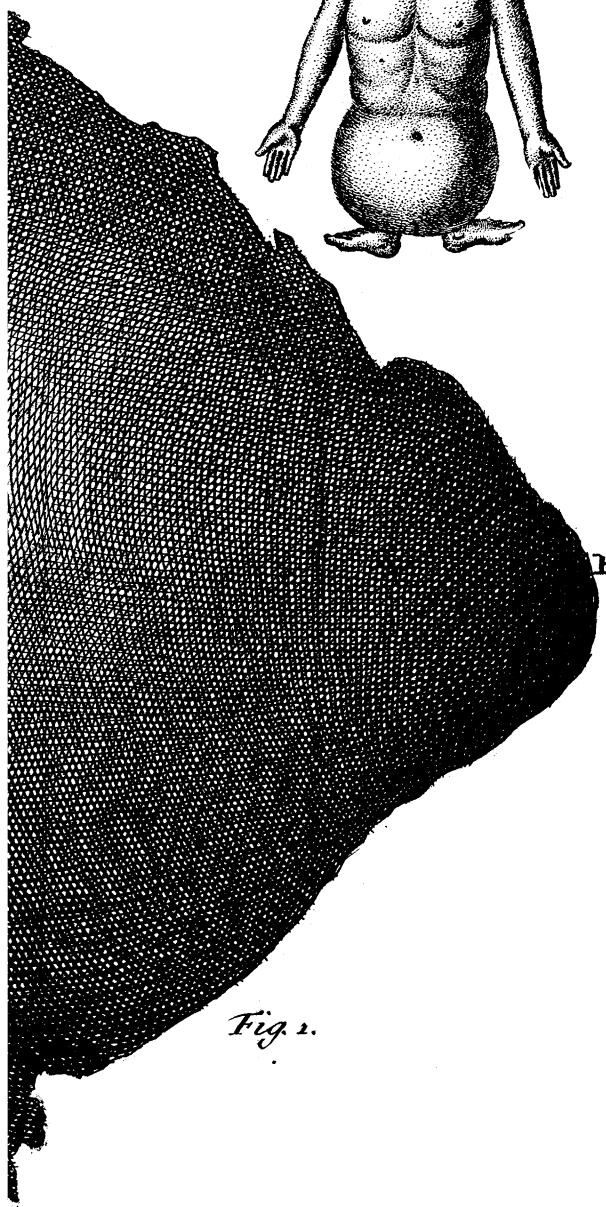
6.

Fig. 2.



B

Fig. 1.



J. Mynde Sculp.

TAB. I.

Phila.



Philos. Trans. N° 456.

Fig. 2.

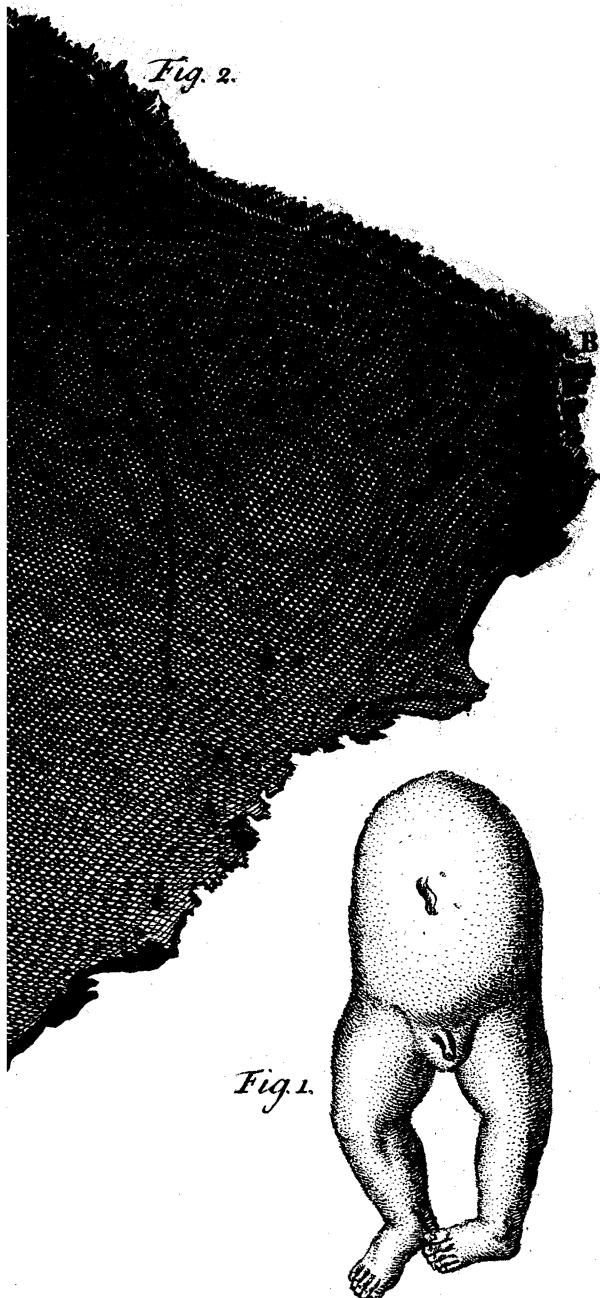


Fig. 1.

TAB. II.

Philos Trans. N° 456.

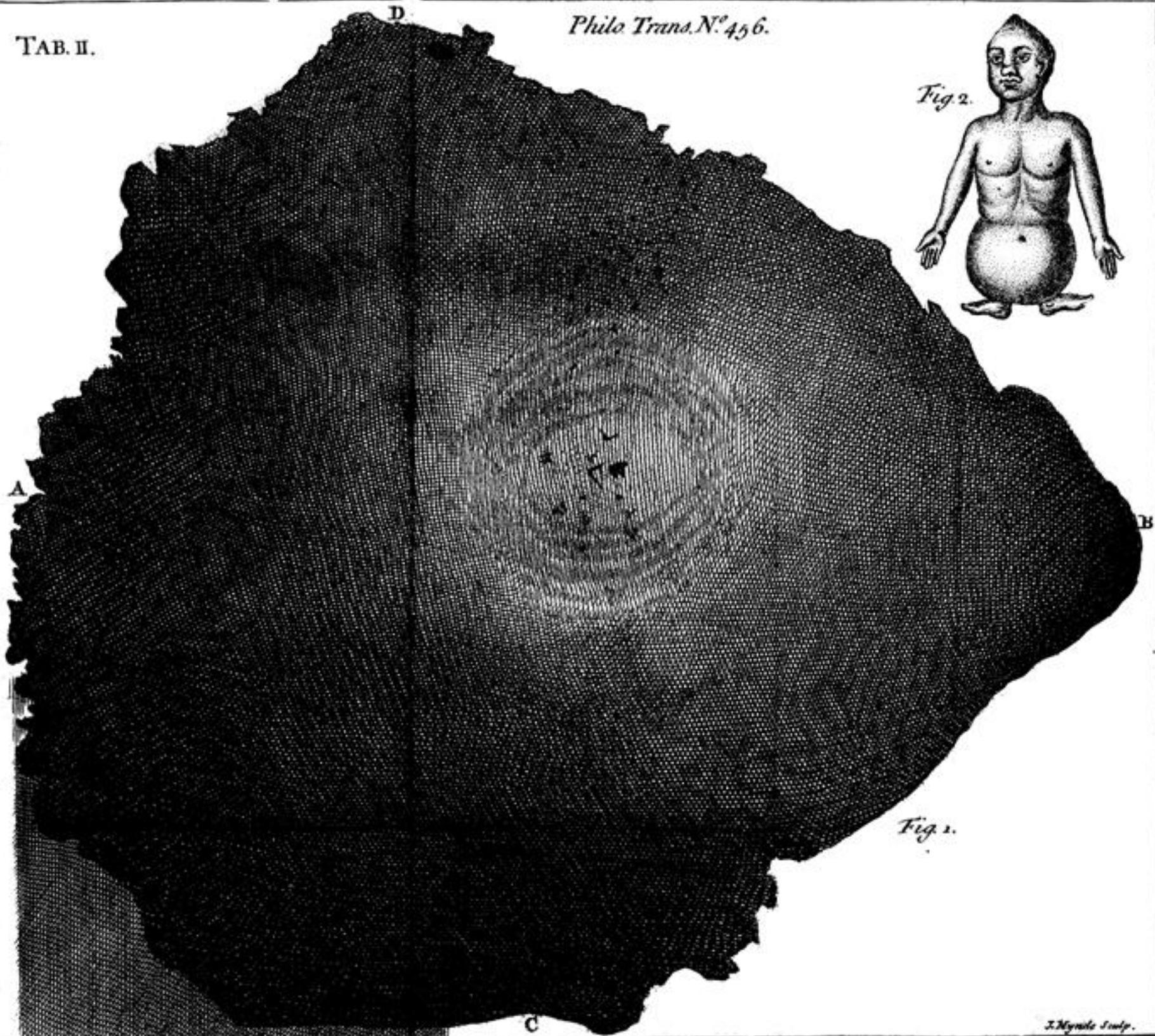


Fig. 2.

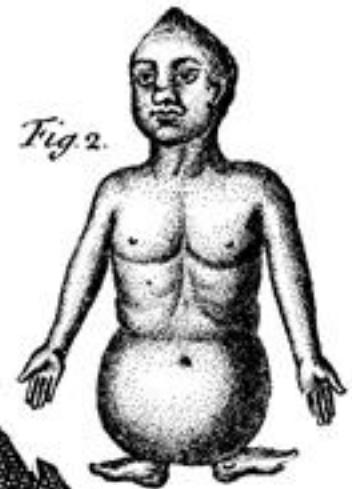


Fig. 1.

J. Mynde Sculp.

TAB. I.

Phil. Trans. N.^o 456.

